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*Patrick C. Lynch, Attorney General*

February 8, 2006

Luly Massaro, Clerk  
Public Utilities Commission  
150 South Main Street  
Providence, RI 02903

Re: Docket No. 3707

Dear Ms. Massaro:

Enclosed for filing with the Commission, please find an original and nine (9) copies of the Direct Testimony of Thomas S. Catlin and David R. Stearns.

Very truly yours,

Leo J. Wold  
Special Assistant Attorney General

cc: Stephen Scialabba, Chief Accountant, DPUC  
Service List

**BEFORE THE  
PUBLIC UTILITIES COMMISSION  
OF RHODE ISLAND**

**THE NARRAGANSETT  
BAY COMMISSION**

)  
)

**DOCKET NO. 3707**

**DIRECT TESTIMONY  
OF  
THOMAS S. CATLIN**

**ON BEHALF OF THE  
DIVISION OF PUBLIC UTILITIES AND CARRIERS**

**FEBRUARY 2006**

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**EXETER**

ASSOCIATES, INC.  
5565 Sterrett Place  
Suite 310  
Columbia, Maryland 21044

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1 financial and implementation analyses in conjunction with utility construction projects. I  
2 also served as project engineer for two utility valuation studies.

3 From June 1977 until September 1981, I was employed by Camp Dresser &  
4 McKee, Inc. Prior to transferring to the Management Consulting Division of CDM in  
5 April 1978, I was involved in both project administration and design. My project  
6 administration responsibilities included budget preparation and labor and cost monitoring  
7 and forecasting. As a member of CDM's Management Consulting Division, I performed  
8 cost of service, rate, and financial studies on approximately 15 municipal and private  
9 water, wastewater and storm drainage utilities. These projects included: determining  
10 total costs of service; developing capital asset and depreciation bases; preparing cost  
11 allocation studies; evaluating alternative rate structures and designing rates; preparing bill  
12 analyses; developing cost and revenue projections; and preparing rate filings and expert  
13 testimony.

14 In September 1981, I accepted a position as a utility rates analyst with Exeter  
15 Associates, Inc. I became a principal and vice-president of the firm in 1984. Since  
16 joining Exeter, I have continued to be involved in the analysis of the operations of public  
17 utilities, with particular emphasis on utility rate regulation. I have been extensively  
18 involved in the review and analysis of utility rate filings, as well as other types of  
19 proceedings before state and federal regulatory authorities. My work in utility rate filings  
20 has focused on revenue requirements issues, but has also addressed service cost and rate  
21 design matters. I have also been involved in analyzing affiliate relations, alternative  
22 regulatory mechanisms, and regulatory restructuring issues. This experience has  
23 involved electric, natural gas transmission and distribution, and telephone utilities, as  
24 well as water and wastewater companies.

1 Q. HAVE YOU PREVIOUSLY TESTIFIED IN REGULATORY  
2 PROCEEDINGS ON UTILITY RATES?

3 A. Yes. I have previously presented testimony on more than 200 occasions before the  
4 Federal Energy Regulatory Commission and the public utility commissions of Arizona,  
5 California, Colorado, Delaware, the District of Columbia, Florida, Idaho, Illinois,  
6 Indiana, Kentucky, Louisiana, Maine, Maryland, Montana, Nevada, New Jersey, Ohio,  
7 Oklahoma, Pennsylvania, Utah, Virginia and West Virginia, as well as before this  
8 Commission. I have also filed rate case evidence by affidavit with the Connecticut  
9 Department of Public Utility Control.

10 Q. ARE YOU A MEMBER OF ANY PROFESSIONAL SOCIETIES?

11 A. Yes. I am a member of the American Water Works Association (AWWA) and the  
12 Chesapeake Section of the AWWA. I serve on the AWWA's Rates and Charges  
13 Committee and the AWWA Water Utility Council's Technical Advisory Group on  
14 Economics.

15 Q. ON WHOSE BEHALF ARE YOU APPEARING?

16 A. I am presenting testimony on behalf of the Division of Public Utilities and Carriers (the  
17 Division).

18 Q. DO YOU HAVE PREVIOUS EXPERIENCE IN MATTERS INVOLVING THE  
19 NARRAGANSETT BAY COMMISSION?

20 A. Yes, I presented testimony on behalf of the Division in the Narragansett Bay  
21 Commission's (NBC's) general rate case in Docket No. 3162, its abbreviated rate  
22 proceeding in Docket No. 3409, in the Commission's examination of issues related to the  
23 implementation of a CSO abatement fee or stormwater fee by NBC in Docket No. 3432,

1 NBC's last general rate case in Docket No. 3483, its abbreviated rate filing in Docket No.  
2 3592 and its compliance filing on Docket No. 3639.

3 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

4 A. Exeter Associates was retained by the Division to assist it in the evaluation of the  
5 Abbreviated Rate Filing submitted by NBC on November 1, 2005. This testimony  
6 presents my findings and recommendations both with regard to the overall revenue  
7 increase to which NBC is entitled and with regard to the design of rates to recover those  
8 additional revenues. In developing my recommendation, I have incorporated an  
9 adjustment to electricity costs presented by Division witness David Stearns.

10 Q. HAVE YOU PREPARED SCHEDULES TO ACCOMPANY YOUR  
11 TESTIMONY?

12 A. Yes. I have prepared Schedules TSC-1 through TSC-10. Schedule TSC-1 provides a  
13 summary of revenues and expenses under present and proposed rates. Schedules TSC-2  
14 through TSC-8 present my adjustments to NBC's claimed revenues and operating  
15 expenses. Schedules TSC-9 and TSC-10 set forth my findings and recommendations  
16 with regard to rate design.

17  
18 **Summary and Recommendations**

19 Q. PLEASE SUMMARIZE THE RATE RELIEF REQUESTED BY NBC IN ITS  
20 FILING.

21 A. As discussed in the testimony of NBC witness Walter E. Edge, NBC's filing seeks an  
22 increase in revenues of \$3,108,471, which represents an overall revenue increase of 5.10  
23 percent. To develop its claim, NBC utilized the rate year cost of service for fiscal year  
24 (FY) 2005 approved in Docket No. 3592 as the test year and modified in Docket No.

1 3639 to reflect additional debt service. NBC then adjusted these amounts for certain  
2 changes to become effective for a FY 2007 rate year.

3 Q. PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS.

4 A. As shown on Schedule TSC-1, I have determined the NBC's overall revenue requirement  
5 to be \$63,641,347. This represents an increase over revenues at present rates of  
6 \$2,036,547. The revenue increase that I have identified is \$1,071,924 less than the  
7 revenue increase of \$3,108,471 requested by NBC. This difference is the result of the  
8 adjustments to NBC's claimed revenues and operating expenses that are summarized on  
9 Schedule TSC-2.

10 With regard to the development of rates to recover the NBC's overall cost of  
11 service, I am accepting NBC's proposal that existing rates other than septage charges,  
12 BOD/TSS surcharges, connection permit fees and discharge permit fees be increased on  
13 an across-the-board uniform percentage basis.

14 Q. WHAT TIME PERIODS HAVE YOU UTILIZED IN MAKING YOUR  
15 DETERMINATION OF NBC'S REVENUE REQUIREMENTS?

16 A. Consistent with NBC's filing, I have utilized a test year ended June 30, 2005 and a rate  
17 year ending June 30, 2007 as the basis for determining NBC's revenue requirements and  
18 the revenue increase necessary to recover those requirements. In reviewing NBC's filing,  
19 I have focused on those accounts and expense elements specifically addressed by NBC in  
20 its filing. However, I have also reviewed the overall level of costs in those accounts not  
21 addressed by Mr. Edge's testimony. Also, I have evaluated each of NBC's claimed  
22 adjustments to its cost of service, but only address in testimony those items where I have  
23 identified an issue with NBC's request.

1 Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

2 A. The remainder of my testimony is organized into sections corresponding to the issue or  
3 topic being addressed. These sections are set forth in the table of contents for this  
4 testimony.

5

6 **User Fee Revenue**

7 Q. WHAT ADJUSTMENT HAVE YOU MADE TO USER FEE REVENUE?

8 A. I have adjusted user fee revenue to be consistent with the annualized revenues approved  
9 by the Commission in Docket No. 3639. It appears that, in compiling the information for  
10 this filing, NBC utilized an incorrect figure for residential measured usage charges. As  
11 shown on Schedule WEE-13, NBC's filing includes \$20,752,066 for residential measured  
12 fees compared to the approved revenue of \$20,755,812 in Docket No. 3639. The  
13 amounts for all other user fees shown on Schedule WEE-13 agree with those shown on  
14 Mr. Edge' Schedule WEE-5 in Docket No. 3639 and approved by the Commission in that  
15 proceeding. Although this adjustment only increases revenue by \$3,746, it is appropriate  
16 that user fee revenues be consistent with those approved by the Commission.

17

18 **Interest Income**

19 Q. WHAT AMOUNT DID NBC RECOGNIZE AS INTEREST INCOME IN THIS  
20 PROCEEDING?

21 A. In its filing, NBC recognized \$244,713 of interest income as available to reduce the costs  
22 that must be recovered through user fees. This amount was the total actual interest  
23 income in FY 2002 and was utilized as the ongoing level of interest income for the FY  
24 2004 rate year in Docket No. 3483, NBC's last general rate proceeding. This same

1 \$244,713 has previously been carried forward as the rate year interest income in its  
2 abbreviated rate filing in Docket No. 3592 and its compliance rate filing in Docket No.  
3 3639, both of which utilized an FY 2005 rate year.

4 Q. HOW DOES THE INTEREST INCOME RECOGNIZED BY NBC COMPARE  
5 TO ACTUAL INTEREST INCOME IN YEARS SUBSEQUENT TO FY 2002?

6 A. In FY 2003, actual total interest income was \$260,466, which is consistent with that in  
7 FY 2002.<sup>1</sup> However, in FY 2004, total interest income increased to \$515,567. Total  
8 interest income further increased to \$914,079 in FY 2005.

9 Q. WHAT IS THE CAUSE OF THIS INCREASE IN INTEREST INCOME?

10 A. The increase in the interest income over the last few years coincides with a build-up in  
11 the restricted account balance. NBC has indicated that it is maintaining a larger restricted  
12 account balance in order to have the funds on hand at the time that the debt service  
13 payments must be made. This is necessitated because revenues are collected more or less  
14 uniformly over the course of the fiscal year whereas the debt service payments are  
15 concentrated in September and March.

16 Q. WHY DID NBC NOT RECOGNIZE THE INCREASE IN INTEREST INCOME  
17 IN THIS PROCEEDING?

18 A. According to the responses to Division data requests Set 3, Nos. 6 and 7 (DIV 3-6 and  
19 DIV 3-7), NBC is only proposing to include interest on its operating accounts as an offset  
20 to the cost of service. NBC suggests that interest earned on the restricted debt  
21 service/capital account balance is not properly recognized as an offset to the cost of

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<sup>1</sup> At the time of NBC's abbreviated rate filing in Docket No. 3592 in early 2004, FY 2003 data was the most recent data available. Docket No. 3639, filed in late 2004, was a compliance filing that only considered additional debt costs.

1 service and that such interest must be retained in the restricted accounts according to the  
2 Trust Indenture.

3 Q. WHAT ADJUSTMENT ARE YOU PROPOSING RELATED TO THE  
4 INTEREST INCOME THAT IS RECOGNIZED AS AN OFFSET TO THE  
5 REVENUE REQUIREMENTS THAT MUST BE RECOVERED THROUGH  
6 USER FEE REVENUES?

7 A. I am proposing that the amount of interest income that is recognized as an offset to the  
8 cost of service be adjusted to include all interest income, including that earned on the  
9 Capital/Debt/Debt Coverage restricted account.

10 Q. DO YOU AGREE WITH THE CLAIM THAT RECOGNIZING THE  
11 INTEREST EARNED ON THE RESTRICTED FUNDS IS NOT PROPER OR  
12 NOT ALLOWED BY THE INDENTURE AGREEMENT?

13 A. No. First, as noted above, total interest including that on the restricted debt  
14 service/capital account has been recognized as an offset to the cost of service in the past.  
15 Moreover, I was unable to find any provision of the Trust Indenture that requires that the  
16 interest earned on the restricted account balances must be retained in those accounts. In  
17 fact, all interest income is recorded as current income on NBC's books. If the Trust  
18 Indenture required the interest income earned on the restricted account balances to be  
19 retained in those accounts, then that interest could not be recorded as income. Finally, in  
20 Docket No. 3592, NBC's financial adviser, Maurier Gurghigian, presented a model of the  
21 sources of uses of funds available to meet debt service and capital costs. In her analysis,  
22 no interest income was included in the restricted account as available to meet debt service  
23 or capital requirements. All interest income was recognized as a source of revenue  
24 available to meet current revenue requirements in her model.

1 Q. WHY IS IT APPROPRIATE TO RECOGNIZE THIS INTEREST INCOME AS  
2 A SOURCE OF REVENUE AVAILABLE TO MEET TOTAL REVENUE  
3 REQUIREMENTS?

4 A. As noted previously, NBC has significantly increased the balance it maintains in its  
5 restricted accounts, at least in part to meet debt service payments. This increased balance  
6 has been funded by ratepayers through the amounts which have been collected in rates for  
7 debt service and debt coverage requirements in excess of actual debt service payments  
8 and amounts spent on capital improvements. Moreover, each time debt service increases,  
9 the amount required to meet the 25 percent coverage requirement increases and, in turn,  
10 the amount available to pay for capital improvements in the following year increases.  
11 Therefore, it is appropriate to recognize the interest earned on the restricted account  
12 balances as a cost of service offset.

13 Q. WHAT AMOUNT OF INTEREST INCOME ARE YOU PROPOSING TO  
14 RECOGNIZE?

15 A. As shown on Schedule TSC-3, I have recognized interest income of \$914,079 as a source  
16 of revenue available to meet current revenue requirements. I have based this amount on  
17 NBC's actual interest income in FY 2005. This represents an increase in interest income  
18 of \$669,366 compared to interest income recognized by NBC in its filing.

19

20 **Union Pension Expense**

21 Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO PENSION EXPENSE FOR  
22 UNION EMPLOYEES.

23 A. In its filing, NBC adjusted benefits expense to reflect a projected increase in the required  
24 contribution to the union pension plan for the rate year. NBC based its adjustment on the

1 preliminary FY 2007 contribution rate for union employees applied to the test year  
2 salaries and wages of union employees. Subsequent to the preparation of NBC's filing,  
3 the contribution rate for the union pension plan was finalized at 18.4 percent, compared  
4 to the 17.17 percent rate that NBC utilized. To more accurately reflect the rate year level  
5 of pension expense for union employees, I have revised NBC's adjustment to reflect the  
6 actual contribution rate of 18.4 percent.

7 Q. DID YOU MAKE ANY OTHER CHANGES TO NBC'S CLAIMED  
8 EXPENSE?

9 A. Yes. In developing its adjustment to recognize the higher pension contribution rate, NBC  
10 treated the entire increase as an increase in operations and maintenance (O&M) expense.  
11 However, a portion of employee benefits expense is capitalized along with the associated  
12 salaries and wages for employees that charge their time to construction projects.  
13 Accordingly, in calculating the appropriate adjustment to O&M expense, I have  
14 accounted for the portion of the increase in pension expense that will be capitalized.

15 Q. HAVE YOU PREPARED A SCHEDULE SHOWING YOUR ADJUSTMENT  
16 TO UNION PENSION EXPENSE?

17 A. Yes. Schedule TSC-4 presents my adjustment to pension expense for union employees.  
18 As indicated there, I have multiplied test year union wages by the FY 2007 contribution  
19 rate of 18.4 percent to determine the total contribution. I then compared this amount to  
20 the total test year expense prior to accounting for the portion capitalized to determine the  
21 increase in total union pension expense. Finally, I netted out the portion capitalized to  
22 derive the net increase in O&M expense of \$320,260. This represents an increase of  
23 \$28,463 compared to the increase reflected by NBC in its filing.

24

1 **Health Insurance**

2 Q. PLEASE SUMMARIZE HOW NBC DERIVED ITS CLAIMED RATE YEAR  
3 EXPENSE FOR HEALTH INSURANCE.

4 A. NBC adjusted test year expense to reflect the projected level of health insurance  
5 premiums for the rate year. For medical insurance, NBC estimated the FY 2007  
6 premiums per employee by escalating the actual FY 2006 premiums by the average  
7 annual increase over the three-year period from FY 2003 to FY 2006. For dental  
8 premiums, NBC utilized the actual locked-in rates that will be in the effect in FY 2007.  
9 For vision premiums, the FY 2006 rates were not changed from those in effect in FY  
10 2006. The overall costs were based on 250 participating employees for each type of  
11 coverage.

12 Q. WHAT ADJUSTMENTS ARE YOU PROPOSING TO MAKE TO NBC'S  
13 CLAIMED EXPENSE?

14 A. I am proposing four revisions to NBC's projection of rate year health insurance expense.  
15 First, I have revised the projections of FY 2007 medical insurance premiums to reflect  
16 the average annual growth over the two-year period from FY 2004 to FY 2006 rather  
17 than over three years as proposed by NBC. The increase in medical insurance premiums  
18 from both FY 2004 to FY 2005 and FY 2005 to FY 2006 was in the range of 7 to 9  
19 percent per year. In contrast, the increase from FY 2003 to FY 2004 was in the range of  
20 26 to 30 percent for the different plans (PPO and HMO). As a result of including the  
21 experience from FY 2003 to FY 2004, NBC has projected that FY 2007 medical  
22 insurance premiums will be 13.4 percent higher than FY 2006 for PPO coverage and 15.6  
23 percent higher for HMO coverage. This is inconsistent with more recent experience and,  
24 hence, is unduly speculative. Based on experience for the last two years, I have reflected

1 increases in FY 2007 premiums of 7.28 percent for the PPO plan and 8.46 percent for the  
2 HMO plan.

3 The second change I have made to NBC's projection of rate year health premiums  
4 is to reflect actual levels of participation. In developing its projection, NBC updated its  
5 test year estimates from its prior case to reflect higher levels of premiums. However,  
6 NBC did not make any adjustment to reflect actual employee levels and, hence, the  
7 number of plan participants. I have revised the projected level of health insurance  
8 premiums to reflect 246 participating members. This is based on the actual number of  
9 participants (242) as of December 2, 2005 plus four additional participants. The  
10 additional four participants recognizes that the test year cost of service used as the  
11 starting point in this proceeding already includes a separate adjustment to account for  
12 four vacant positions due to employee turnover.

13 Third, I have adjusted rate year health insurance premiums to recognize the co-  
14 payments made by certain employees who elect to take the PPO option. Although the  
15 amount of such co-payments is small (\$8,727 per year), there is no reason to ignore these  
16 cost offsets in calculating the rate year cost of service.

17 Finally, as discussed with regard to union pension expense, I have recognized that  
18 a portion of the increase in health insurance premiums is associated with employees  
19 whose time is charged to capital projects. Accordingly, in calculating the increase in  
20 O&M expense, I have netted out 9.5 percent of the increase in premiums to account for  
21 the increase in the premiums capitalized.

22 Q. HAVE YOU PREPARED A SCHEDULE THAT PRESENTS YOUR  
23 ANALYSIS OF THE ALLOWABLE INCREASE IN HEALTH INSURANCE  
24 PREMIUMS?

1 A. Yes. Schedule TSC-5 presents my analysis of rate year health insurance premiums. As  
2 indicated there I have projected rate year premiums to be \$2,906,497. This represents an  
3 increase of \$278,788 compared to the test year before netting out the portion of the  
4 increase capitalized. After netting out the capitalized portion, the net increase in  
5 personnel services related O&M expense is \$252,303. This is \$193,126 less than the  
6 increase in O&M expense claimed by NBC.

7 **Electric Rates**

8 Q. PLEASE SUMMARIZE THE ADJUSTMENT TO RATE YEAR  
9 ELECTRICITY COSTS RELATED TO ELECTRIC RATES THAT YOU HAVE  
10 INCLUDED IN THE SUMMARY OF THE DIVISION'S ADJUSTMENTS ON  
11 SCHEDULE TSC-2.

12 A. I have incorporated the adjustment to electricity costs presented by Mr. Stearns. As  
13 explained by Mr. Stearns, by rounding up delivery rates paid to Narragansett Electric  
14 Company (d/b/a/National Grid), NBC has overstated rate year electricity costs. As  
15 presented on Mr. Stearn's Exhibit 1, this adjustment reduces the rate year cost of service  
16 by \$63,932.

17  
18 **Incinerator Electricity Costs**

19 Q. WHAT ADJUSTMENT HAS NBC MADE TO TEST YEAR ELECTRICITY  
20 COSTS IN ITS FILING?

21 A. In its filing, NBC adjusted test year electricity costs to reflect the projected level of costs  
22 in the FY 2007 rate year. As part of this adjustment, NBC incorporated the rates under its  
23 new supply contract, as well as reflecting changes in its operations. These changes  
24 included increased electricity usage at its Bucklin Point facility due to the new equipment

1 and treatment processes along with elimination of the usage at Field's Point for sludge  
2 incineration.

3 Q. WHAT ISSUE HAVE YOU IDENTIFIED WITH RESPECT TO NBC'S  
4 PROJECTION OF RATE YEAR ELECTRICITY COSTS?

5 A. In developing its projection of electricity expense, NBC utilized a two-year average of  
6 electricity requirements to develop the normalized kWh usage for the rate year. NBC  
7 then calculated the cost of this usage based on the higher rates that will be in effect  
8 during the rate year under the new supply contract and other applicable charges. As part  
9 of its projection for the Field's Point facility, NBC included the two-year average usage  
10 at the Field's Point incinerator of 1,983,971 kWh. This resulted in NBC including  
11 \$206,560 for the costs of electricity usage by the Field's Point incinerator in its overall  
12 estimate of rate year electricity costs at Field's Point, as reflected on Schedule WEE-10.  
13 NBC then accounted for the elimination of the Field's Point incinerator from its cost of  
14 service by subtracting out the test year cost of electricity use at the incinerator of  
15 \$142,194. This results in an overstatement of electricity costs in NBC's filing of  
16 \$64,366.

17 Q. HAVE YOU CALCULATED YOUR ADJUSTMENT BASED ON THE  
18 ADJUSTED ELECTRICITY RATES PRESENTED BY MR. STEARNS ON  
19 BEHALF OF THE DIVISION?

20 A. Yes. My adjustment to correct the overstatement of electricity costs based on the  
21 adjusted rates developed by Mr. Stearns is presented on Schedule TSC-6. As part of his  
22 adjustment to delivery rates, Mr. Stearns has reduced the delivery rate for Field's Point  
23 from \$0.028 per kWh to \$0.02738 per kWh. As a result, the electricity costs included for  
24 the Fields Point incinerator after Mr. Stearns' adjustment are \$205,279. Therefore, the

1 adjustment necessary to fully remove these costs is \$63,085 more than the \$142,194  
2 removed by NBC. I would note that the effect of this adjustment is the same as would  
3 have resulted if NBC had simply excluded the incinerator kWh from its calculation of  
4 normalized usage at Field's Point.

5  
6 **Natural Gas Costs**

7 Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO NATURAL GAS COSTS.

8 A. Similar to electricity costs, NBC adjusted test year natural gas costs to reflect changes in  
9 the cost of gas and changes in operations expected in the rate year. However, unlike  
10 electricity, NBC has not yet entered into a new natural gas supply contract to replace the  
11 one that expires at the end of March 2006. Accordingly, NBC obtained indicative  
12 projections of the new contract price from its current gas supplier, Select Energy, Inc.  
13 Select Energy based its projections on NYMEX settlement prices of October 11, 2005 for  
14 12 and 24-month natural gas strip prices beginning April 2006. NBC utilized the 24-  
15 month strip as the basis for its adjustment and then and then added the basis differential  
16 and loss adjustment identified by Select Energy.

17 My review of the indicative bid, as well as more recent price quotes provided by  
18 Select Energy reveals that those prices are well in excess of the current Gas Cost Rate  
19 (GCR) of New England Gas Company. NBC is allowed to return to gas sales service at  
20 the GCR rate if it provides New England Gas with 30 days notice and agrees to take  
21 service for one year. Accordingly, I am proposing to adjust NBC's claimed cost of gas  
22 under the assumption that NBC adopts that option. However, as discussed below, I  
23 believe that it is imperative that NBC seek competitive bids for its natural gas supply  
24 needs.

1 Q. HAVE YOU QUANTIFIED YOUR ADJUSTMENT?

2 A. Yes, the calculation of my adjustment is presented on Schedule TSC-7. New England  
3 Gas Company's current GCR of \$1.197 per therm will remain in effect through October  
4 2006. For purposes of my analysis, I have assumed that the rate will increase will  
5 increase by a small amount (4 percent) on November 1, 2006 and have calculated an  
6 average GCR rate on that basis. As shown on Schedule TSC-7, this results in a reduction  
7 in purchased gas costs of \$36,298.

8 As part of my adjustment to natural gas costs, I have also corrected NBC's  
9 calculation of the Rhode Island Gross Earnings Tax that is added to the charges for  
10 natural gas service. In its calculation, NBC utilized a tax multiplier of 4.1667 percent  
11 based on a tax rate of 4.0 percent. However, the Rhode Island Gross Earnings Tax  
12 applicable to natural gas service is 3.0 percent. Accordingly, I have recalculated Rhode  
13 Island Gross Earnings Tax using a multiplier of 3.0928 percent. This results in a  
14 reduction in gross earnings taxes of \$1,123. As shown on Schedule TSC-7, my total  
15 adjustment to natural gas costs is then \$37,421.

16 Q. DO YOU HAVE ANY ADDITIONAL COMMENTS WITH REGARD TO  
17 NBC'S NATURAL GAS SUPPLY CONTRACT?

18 A. Yes. As noted previously, the indicative price utilized by NBC to estimate the cost of gas  
19 in the rate year was provided by Select Energy, Inc. Select Energy, Inc. is NBC's current  
20 gas supplier for other than its corporate office building (which is served by New England  
21 Gas). It is not clear from the testimony and discovery in this case whether it is NBC's  
22 intent to seek competitive bids to replace the contract with Select Energy when it expires  
23 at the end of March or to simply enter into a new contract with Select Energy. However,  
24 the need to fully evaluate all options is clearly demonstrated by the difference between

1 Select Energy's price estimates and New England Gas Company's GCR rate. Therefore,  
2 I believe that it is essential that NBC seek competitive bids for its new contract and  
3 evaluate those bids relative to the GCR rate of New England Gas to ensure that NBC is  
4 satisfying its obligation to provide service at the lowest reasonable cost.  
5

### 6 Hypochlorite Costs

7 Q. WHAT ADJUSTMENT DID NBC MAKE TO CHEMICAL COSTS IN ITS  
8 FILING?

9 A. Under the new Bucklin Point management contract, the contractor provides and pays for  
10 hypochlorite and soda ash as part of its overall fee. Accordingly, NBC made an  
11 adjustment to eliminate the cost of these two chemicals at Bucklin Point in conjunction  
12 with its other adjustments to reflect the changes in that plant's operations.

13 As shown on Mr. Edge's Schedule WEE-12, NBC's adjustment eliminates all  
14 soda ash costs because the full test year expense was associated with Bucklin Point.  
15 However, because hypochlorite is also utilized at Field's Point and in interceptor  
16 maintenance, only a portion of hypochlorite costs are eliminated. As also shown on  
17 Schedule WEE-12, NBC has removed \$20,117 of hypochlorite costs for Bucklin Point,  
18 leaving \$369,705 as the rate year allowance for this chemical's use at Field's Point and  
19 for interceptor maintenance (IM).

20 Q. WHAT ISSUE HAVE YOU IDENTIFIED WITH REGARD TO THE  
21 ADJUSTMENT TO HYPOCHLORITE COSTS?

22 A. Both the amount of NBC's adjustment to remove Bucklin Point hypochlorite costs and  
23 the adjusted rate year hypochlorite costs associated with Field's Point and IM are  
24 inconsistent with actual experience. Hypochlorite costs at Bucklin Point were \$83,252 in  
25 FY 2004 and \$96,065 in FY 2005, compared to \$20,117 removed by NBC. Compared to

1 the remaining rate year allowance of \$369,705 claimed by NBC, actual hypochlorite  
2 costs for Field's Point and IM were \$306,483 in FY 2004 and \$305,578 in FY 2005.

3 Q. WHAT ADJUSTMENT HAVE YOU MADE TO HYPOCHLORITE COSTS TO  
4 CORRECT THIS INCONSISTENCY?

5 A. I have adjusted rate year hypochlorite costs to reflect the average costs in FY 2004 and  
6 FY 2005 for Field's Point and IM. As shown on Schedule TSC-8, this results in a rate  
7 year allowance of \$306,031 and a reduction of \$63,675 compared to NBC's filed claim.  
8 Overall, my recommended rate year allowance for hypochlorite costs represents a  
9 reduction of \$83,791 compared to the test year expense of \$389,822 that includes Bucklin  
10 Point requirements. This adjustment is consistent with the historical levels of  
11 hypochlorite costs at Bucklin Point that are being eliminated.

12  
13 **Rate Design**

14 Q. HOW ARE YOU PROPOSING TO DESIGN RATES TO RECOVER THE  
15 REVENUE INCREASE THAT YOU HAVE IDENTIFIED ON BEHALF OF  
16 THE DIVISION?

17 A. I am proposing that the rates necessary to generate the revenue increase that I have  
18 identified be developed by increasing rates on a uniform percentage basis. This uniform  
19 percentage increase would be applied to both flat fees and measured usage fees for  
20 residential, commercial and industrial customers. I have excluded connection permit  
21 fees, septage fees, BOD/TSS surcharges and discharge permit fees consistent with the  
22 procedure that NBC has proposed to recover its proposed increase.

23 Q. HAVE YOU PREPARED SCHEDULES SHOWING THE CALCULATION OF  
24 YOUR PROPOSED RATES?

1 A. Yes. Schedule TSC-9 shows the derivation of the uniform percentage increase in existing  
2 rates necessary to generate the required rate increase. As shown on that schedule, the  
3 overall percentage increase in rates is 3.52 percent.

4 Schedule TSC-10 shows the calculation of the proposed rates based on the  
5 application of the 3.52 percent increase to the current rates. Schedule TSC-10 also  
6 provides a proof of revenue at proposed rates.

7 Q. DOES THAT CONCLUDE YOUR TESTIMONY?

8 A. Yes, it does.

**BEFORE THE  
PUBLIC UTILITIES COMMISSION  
OF RHODE ISLAND**

**THE NARRAGANSETT  
BAY COMMISSION**

)  
)

**DOCKET NO. 3707**

**SCHEDULES ACCOMPANYING THE  
DIRECT TESTIMONY  
OF  
THOMAS S. CATLIN  
  
ON BEHALF OF THE  
DIVISION OF PUBLIC UTILITIES AND CARRIERS**

**FEBRUARY 2006**

---

**EXETER**

ASSOCIATES, INC.  
5565 Sterrett Place  
Suite 310  
Columbia, Maryland 21044

THE NARRAGANSETT BAY COMMISSION

Summary of Revenues and Expenses at  
Present and Proposed Rates  
Rate Year Ended June 30, 2007

	Test Year Amount Per NBC	NBC Rate Year Adjustments	Rate Year Amount Per NBC	Division Adjustments	Rate Year at Present Rates	Allowable Rate Increase	Rate Year at Proposed Rates
<b>Revenue</b>							
User Fee Revenue	\$ 57,808,953	\$ -	\$ 57,808,953	\$ 3,746	\$ 57,812,699	\$ 2,036,547	\$ 59,849,246
Other Service Revenue	2,382,618	-	2,382,618	-	2,382,618	-	2,382,618
Miscellaneous	740,200	-	740,200	669,366	1,409,566	-	1,409,566
Total Revenue	\$ 60,931,771	\$ -	\$ 60,931,771	\$ 673,112	\$ 61,604,883	\$ 2,036,547	\$ 63,641,430
<b>Expenses</b>							
Personnel Services	15,408,865	737,226	16,146,091	(164,664)	15,981,427	-	15,981,427
Operating Supplies & Expenses	10,535,163	2,017,679	12,552,842	(228,112)	12,324,730	-	12,324,730
Special Services	2,029,039	307,627	2,336,666	-	2,336,666	-	2,336,666
Capital Outlays	1,892,350	-	1,892,350	-	1,892,350	-	1,892,350
Prior Year Debt Coverage	(1,892,350)	-	(1,892,350)	-	(1,892,350)	-	(1,892,350)
Amortization	9,690	-	9,690	-	9,690	-	9,690
Debt Service	25,872,877	-	25,872,877	-	25,872,877	-	25,872,877
Debt Coverage	6,656,397	-	6,656,397	-	6,656,397	-	6,656,397
Total Expenses	\$ 60,512,031	\$ 3,062,532	\$ 63,574,563	\$ (392,776)	\$ 63,181,787	\$ -	\$ 63,181,787
Operating Reserve	419,740	45,938	465,679	(6,037)	459,642	-	459,642
Total Cost of Service	\$ 60,931,771	\$ 3,108,470	\$ 64,040,242	\$ (398,812)	\$ 63,641,430	\$ -	\$ 63,641,430
Revenue Surplus/(Deficiency)	\$ -	\$ (3,108,470)	\$ (3,108,471)	\$ 1,071,924	\$ (2,036,547)	\$ 2,036,547	\$ -

THE NARRAGANSETT BAY COMMISSION

Summary of Division Adjustments to  
Rate Year Revenues and Expenses at Present Rates  
Rate Year Ended June 30, 2007

<u>Description</u>	<u>Amount</u>	<u>Source</u>
<b><u>Revenue Adjustments</u></b>		
Residential Measured Use Fees	\$ 3,746	Refer to testimony
Interest Income	669,366	Schedule TSC-3
Total Revenue Adjustments	<u>\$ 673,112</u>	
<b><u>Expense Adjustments</u></b>		
Union Pension	28,463	Schedule TSC-4
Health Benefits Costs	(193,126)	Schedule TSC-5
Electric Rates	(63,932)	Stearns Exhibit 1
Incinerator Electricity Costs	(63,085)	Schedule TSC-6
Natural Gas Costs	(37,421)	Schedule TSC-7
Hypochlorite Costs	(63,675)	Schedule TSC-8
Operating Reserve	(6,037)	See Note (1)
Total Expense Adjustments	<u>\$ (398,812)</u>	
Total Division Adjustments to Operating Income	<u><u>\$ 1,071,924</u></u>	

Note:

(1) Adjusted to reflect 1.5% of Division Operating Expenses per Schedule TSC-1.

THE NARRAGANSETT BAY COMMISSION

Adjustment to Interest Income to Include  
Interest on Restricted Accounts at Current Levels  
Rate Year Ended June 30, 2007

Total Interest Income (1)	\$ 914,079
Interest Income per NBC (2)	<u>244,713</u>
Adjustment to Rate Year Interest Income	<u><u>\$ 669,366</u></u>

Notes:

(1) Based on FY 2005 interest income per Schedule WEE-3.

(2) Per Schedule WEE-4.

THE NARRAGANSETT BAY COMMISSION

Adjustment to Union Pension Expense  
Rate Year Ended June 30, 2007

Total Rate Year Salaries & Wages and Overtime (1)	\$	5,047,206
Updated Pension Contribution Rate (2)		<u>18.40%</u>
Rate Year Union Pension Contribution	\$	928,686
Test Year Expense (1)		<u>574,808</u>
Increase in Union Pension Expense	\$	353,878
Portion Capitalized at 9.5% (3)		<u>(33,618)</u>
Adjustment to Personnel Services Expense	\$	320,260
Increase Per Company (1)		<u>291,797</u>
Adjustment to Rate Year Expense	\$	<u><u>28,463</u></u>

Notes:

(1) Per Schedule WEE-5.

(2) Per response to DIV 1-2.

(3) Based on ratio of fringe benefits capitalized to total fringe benefits for the test year as shown on Schedule WEE-4.

THE NARRAGANSETT BAY COMMISSION

Adjustment to Health Benefits Costs  
to Reflect Revised Premium and Employee Levels  
Rate Year Ended June 30, 2007

	Current Premium (1)	Escalation Factor (2)	Rate Year Premium	Number of Members (3)	Annual Cost
<u>Health Insurance</u>					
HMO Family	\$ 427.38	108.46%	463.54	14	\$ 168,729
Single	156.41	108.46%	169.64	3	13,232
PPO Family	491.92	107.28%	527.74	159	2,181,674
Single	180.02	107.28%	193.12	54	271,145
Waiver	2,500.00	N/A	2,500	16	40,000
Total				246	\$ 2,674,781
<u>Dental Insurance</u>					
Family			37.61	185	180,904
Single			13.56	57	20,096
Waiver			110.00	4	440
Total				246	\$ 201,440
<u>Vision Insurance</u>					
Family			6.96	189	34,201
Single			3.24	57	4,802
Total				246	\$ 39,003
Total Rate Year Premiums					\$ 2,915,224
Less: Employee Co-Payments					\$ (8,727)
Net Rate Year Premiums					\$ 2,906,497
Test Year Expense (4)					2,627,709
Increase in Total Premiums					\$ 278,788
Portion Capitalized at 9.5% (6)					(26,485)
Adjustment to Personnel Services Expense					\$ 252,303
Increase Per Company (1)					445,429
Adjustment to Rate Year Expense					\$ (193,126)

Notes:

- (1) Per response to DIV 1-3.
- (2) Reflects 2 year growth rate from FY 2004 to FY 2006 based on response to DIV 1-3.
- (3) Per response to DIV 1-4. Four additional employees (3 family, 1 single) have been added to account for employee vacancies accounted for in Turnover Allowance from Docket No. 3592.
- (4) Per Schedule WEE-5.
- (5) Per response to DIV 1-5.
- (6) Based on ratio of fringe benefits capitalized to total fringe benefits for the test year per Schedule WEE-4.

THE NARRAGANSETT BAY COMMISSION

Adjustment to Electricity Costs  
to Correct for Removal of Incinerator Consumption  
Rate Year Ended June 30, 2007

	<u>Division Adjusted Electric Rates</u>
Field's Point Incinerator Usage (kWh) (1)	1,983,971
Combined Supply and Delivery Rate (2)	<u>0.09933</u>
Subtotal	\$ 197,068
R.I. Gross Earnings Tax at 4.1666%	<u>8,211</u>
Total Decremental Cost	\$ 205,279
Rate Year Deduction per NBC (3)	<u>142,194</u>
Adjustment to Rate Year Expense	<u><u>\$ (63,085)</u></u>

Notes:

- (1) Per response to Division 1-11.
- (2) Adjusted rate per Exhibit 1 of David Stearns.
- (3) Per Schedule WEE-10.

THE NARRAGANSETT BAY COMMISSION

Adjustment to Natural Gas Costs  
Rate Year Ended June 30, 2007

Estimated Average Rate Year New England Gas GCR Rate (1)	\$ 1,229
Cost per Therm per NBC (2)	1,339
Adjustment	<u>\$ (0.110)</u>
Deliveries in Therms (2)	<u>329,744</u>
Adjustment to Cost of Gas	<u>\$ (36,298)</u>
Total Gas Cost Excluding R.I. Gross Earnings Tax per NBC (3)	\$ 550,532
Less: Division Adjustment	(36,298)
Adjusted Cost of Gas Before R.I. Gross Earnings Tax	<u>\$ 514,234</u>
R.I. Gross Earnings Tax at 3.0928%	\$ 15,904
R.I. Gross Earnings Tax per NBC (3)	<u>17,027</u>
Adjustment to R.I. Gross Earnings Tax	<u>\$ (1,123)</u>
Adjustment to Rate Year Expense	<u><u>\$ (37,421)</u></u>

Notes:

(1) Reflects current GCR rate of 1.197 for July-October, with a 4% increase in that rate for the remainder of the rate year.

(2) Per Schedule WEE-9.

(3) Per response to DIV 1-7.

THE NARRAGANSETT BAY COMMISSION

Adjustment to Hypochlorite Costs  
Rate Year Ended June 30, 2007

	<u>FY 2004</u>	<u>FY 2005</u>	<u>Average</u>
Field's Point (1)	\$ 297,976	\$ 300,323	\$ 299,150
Interceptor Maintenance (1)	<u>8,507</u>	<u>5,255</u>	<u>\$ 6,881</u>
Total Expenses	\$ 306,483	\$ 305,578	\$ 306,031
Amount per Company (2)			<u>369,705</u>
Adjustment to Rate Year Expense			<u><u>\$ (63,675)</u></u>

Notes:

(1) Per response to DIV 1-14.

(2) Per Schedule WEE-12.

THE NARRAGANSETT BAY COMMISSION

Calculation of Uniform Percentage Increase in Rates  
Required to Generate Additional Revenues  
Rate Year Ended June 30, 2007

Overall Revenue Increase Required (1)	<u>\$ 2,036,547</u>
Revenues from Services Subject to Increase (2)	
Flat Fees-Residential	\$ 10,648,737
Measured Fees-Residential	20,755,812
Flat Fees-Commercial and Industrial	6,908,120
Measured Fees-Commercial	16,388,850
Measured Fees-Industrial	3,111,180
Discharge Permit Fees	-
Connection Permit Fees	-
BOD/TSS Surcharge	-
Septage Fees	-
Total Revenues from Services Subject to Increase	<u>\$ 57,812,699</u>
Uniform Percentage Increase	<u>3.52%</u>

Notes:

(1) Per Schedule TSC-1.

(2) Per Schedule WEE-13.

THE NARRAGANSETT BAY COMMISSION

Calculation of Proposed Rates and  
Proof of Revenues at Proposed Rates  
Rate Year Ended June 30, 2007

	Current Rate	Percent Increase	Proposed Rate	Billing Units (1)	Revenue at Proposed Rates
<b>Flat Fees</b>					
Residential	\$ 94.38	3.52%	\$ 97.70	112,831	\$ 11,023,589
<b>Commercial &amp; Industrial</b>					
Meter Size					
5/8"	212.00	3.52%	219.00	3,828	838,332
3/4"	317.00	3.52%	328.00	880	288,640
1"	528.00	3.52%	547.00	1,045	571,615
1.5"	1,057.00	3.52%	1,094.00	832	910,208
2"	1,690.00	3.52%	1,750.00	1,799	3,148,250
3"	3,168.00	3.52%	3,280.00	73	239,440
4"	5,280.00	3.52%	5,466.00	51	278,766
6"	10,562.00	3.52%	10,934.00	57	623,238
8"	16,899.00	3.52%	17,494.00	13	227,422
10"	24,292.00	3.52%	25,148.00	1	25,148
Total Commercial & Industrial Flat Fees					\$ 7,151,059
<b>Measured Fees</b>					
Residential	1,942	3.52%	2,010	10,689,623	21,486,142
Commercial	2,813	3.52%	2,912	5,825,507	16,963,876
Industrial	1,810	3.52%	1,874	1,719,119	3,221,629
Total Measured Fees					\$ 41,671,648
<b>Other Revenue</b>					
Discharge Permit Fees	-	3.52%	-		-
Connection Permit Fees	-	3.52%	-		-
BOD/TSS Surcharge	-	3.52%	-		-
Septage Fees	-	3.52%	-		-
					\$ -
<b>Total Service Revenue</b>					\$ 59,846,295
Target Revenue (2)					59,849,246
Variance					\$ (2,950)

Notes:

(1) Per Schedule WEE-14

(2) Per Schedule TSC-9. Target equals revenue at present rates plus required increase.

BEFORE THE  
STATE OF RHODE ISLAND  
PUBLIC UTILITIES COMMISSION

THE NARRAGANSETT  
BAY COMMISSION

DOCKET 3707

DIRECT TESTIMONY  
OF  
DAVID R. STEARNS

ON BEHALF OF THE  
DIVISION OF PUBLIC UTILITIES AND CARRIERS

FEBRUARY 2006

1 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

2

3 A. My name is David R. Stearns and my business address is the Division of Public Utilities  
4 and Carriers ("Division"), 89 Jefferson Boulevard, Warwick, RI 02888.

5

6 Q. WHAT IS YOUR POSITION AT THE DIVISION?

7

8 A. I am a Public Utilities Analyst V for the Division. I have been employed in this position  
9 since June of 2001.

10

11 Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

12

13 A. I graduated from Bryant College of Business Administration in 1978 with a Bachelor of  
14 Science degree in Business Administration, with a major concentration in Accounting. I  
15 have also completed several continuing professional educational courses in the areas of  
16 utility accounting, ratemaking, and regulation.

17

18 Q. PLEASE DESCRIBE YOUR EMPLOYMENT BACKGROUND.

19

20 A. Prior to accepting my current position with the Division in June 2001, I had been  
21 employed with EUA Service Corporation since 1967. EUA Service Corporation, prior to  
22 its merger with National Grid USA, provided accounting, engineering, ratemaking, and  
23 information services to three retail electric utility companies, two located in Rhode Island  
24 and one in Massachusetts.

25

26 Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE RHODE ISLAND PUBLIC  
27 UTILITIES COMMISSION (PUC)?

28

29 A. Yes, I have testified in various dockets on behalf of Division, the former Blackstone  
30 Valley Electric Company and Newport Electric Corporation.

31

32 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

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A. The purpose of my testimony is to address the Narragansett Bay Commission's ("NBC") November 2005 filing (RIPUC Docket No. 3707), specifically Schedule WEE-10.

Q. PLEASE DESCRIBE SCHEDULE WEE-10 OF DOCKET 3707.

A. Schedule WEE-10 ("WEE-10") is titled "Electricity Analysis (Acct. 54090)". WEE-10 presents NBC's calculation of its requested electricity cost adjustment, the estimated increase in electricity costs during fiscal year 2007 ("rate year") compared with the actual average electricity cost incurred during the two fiscal years 2004 and 2005 ("test years"). NBC's calculation is detailed to some extent in the Direct Testimony of Mr. Walter E. Edge at page 5, Lines 25 through 31.

Q. DOES MR. EDGE USE THE ACTUAL NARRAGANSETT RATES IN HIS SCHEDULE WEE-10, WHICH CALCULATES THE PRO FORMA ELECTRICITY ADJUSTMENT?

A. No. The rates shown on Mr. Edge's schedule are not the actual delivery rates of Narragansett Electric, but are the result of dividing total electricity charges by total kWh consumed. They are the average kWh cost expressed as a per-kWh factor developed by NBC. NBC carried the result to three decimal places, after rounding.

Q. DO YOU HAVE ANY CONCERNS REGARDING THE METHOD USED BY NBC TO DETERMINE NBC'S REVENUE REQUIREMENT FOR RECOVERY OF ADDITIONAL RATE YEAR ELECTRICITY COST?

A. In general, as a method to arrive at a rate year estimate, his method is not unreasonable. I do have one concern about his particular methodology. For billing purposes, distribution rates of Narragansett Electric Company (d/b/a/National Grid) are carried out to five decimal places. As shown on WEE-10, NBC has carried the rates to three decimal places, after rounding up. When these rates are applied to 2007 forecast kWh, the

1 resulting cost is materially higher than if the usage was applied to the rate carried out to  
2 five decimal places.

3 I have one additional comment: Narragansett's actual rates include demand as well as  
4 energy charges. As NBC's usage is increasing at Bucklin Point in the rate year due to  
5 changes in treatment methods at that location, it would not be unusual for the load factor  
6 of NBC to improve in the rate year. That would have the effect of reducing NBC's  
7 "average" per kWh rate. I have not factored this effect, an unknown quantity, into my  
8 calculation of the rate year electricity adjustment.

9  
10 Q. HAVE YOU PREPARED AN ALTERNATIVE CALCULATION?

11  
12 A. Yes, that calculation is detailed on Exhibit DS-1.

13  
14 Q. PLEASE DESCRIBE EXHIBIT DS-1.

15 A. Exhibit DS-1. is comprised of two sections;

- 16 1. Calculation of 2-Year Average \$/kWh, shown on Lines 1 through 5, and
- 17 2. Calculation of Rate year Adjustment, shown on Lines 6 through 14.

18 The first section, Calculation of 2-Year Average \$/kWh, can be described as follows:

- 19
  - 20 ■ In response to a Division information request, NBC supplied actual kWh  
21 and delivery cost data by location for the test years, with the exception of  
22 the Bucklin Point location. For that location an estimate was used by  
23 NBC, due to the large increase in consumption of electricity expected at  
24 Bucklin Point in the rate year. The anticipated increase, resulting from  
25 recently installed new equipment with high electricity demand, was the  
26 subject of a recent inquiry by the Division. Delivery cost is presented in  
27 Columns B (FY 2004) and E (FY 2005) and kWh usage is presented in  
28 Columns C (FY 2004), and F (FY 2005).
  - 29 ■ By dividing the costs in Column B by the kWh in Column C and the costs  
30 in Column E by the kWh in Column F, I determined the delivery rates per  
kWh. These rates, carried to five decimal places as is customary for the

1 distribution company, are presented in Columns D and G for FY 2004 and  
2 FY 2005, respectively.

- 3 ■ Next I averaged the test year delivery rates in Columns D and G, again  
4 carrying the results to five decimal places. The results are shown in  
5 Column H.

6  
7 Now I will explain the second section, Calculation of Rate year Adjustment, presented as  
8 Columns A through I, Lines 6 through 14:

- 9 ■ Column B contains the forecast of rate year kWh use, by location. With  
10 the exception of Bucklin Point, as explained above, this forecast is  
11 actually the average usage during fiscal years 2004 and 2005, and  
12 coincides with the kWh forecast on Schedule WEE-10.
- 13 ■ In Column C are the delivery rates from Column H, Lines 1 through 4,  
14 described above.
- 15 ■ By multiplying the rate year kWh in Column B by the delivery rates in  
16 Column C, I determine rate year delivery cost shown in Column D.
- 17 ■ Supply cost, Column E, is calculated by multiplying test year kWh by the  
18 supply cost of \$0.07195/kWh. This cost agrees with supply cost shown on  
19 Schedule WEE-10 and found on page 5, line 21 of Mr. Edge's direct  
20 testimony.
- 21 ■ The amounts in Column F, Customer Charge, also agree with Schedule  
22 WEE-10.
- 23 ■ Column G is the sum of Columns D, E and F, and represents the total  
24 electricity cost prior to RI Gross Earnings Tax (RIGET).
- 25 ■ Dividing the amounts in Column G by 0.96 results in the total cost  
26 including RIGET, shown in Column I. RIGET is shown separately in  
27 Column H.
- 28 ■ At Line 10 of Column I is the total forecast rate year 2007 electricity cost  
29 before expected savings due to closing the incinerator. On Line 11 is the  
30 reduction in expense anticipated by NBC resulting from the closing of the  
31 incinerator. Line 13 is the net forecast rate year 2007 electricity cost. This  
32 amount is compared to the rate year electricity cost from Schedule WEE-

1 10, shown on Line 13. According to this calculation, the rate year  
2 adjustment (the difference between NBC's forecast electricity cost during  
3 the rate year, \$3,433,372, and the total calculated on Exhibit DS-1,  
4 \$3,369,440,) is \$63,932. The Division recommends a reduction of  
5 \$63,932 in the rate year electricity expense adjustment filed by NBC.  
6

7 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

8  
9 A. Yes, it does.

**STATE OF RI DIVISION OF PUBLIC UTILITIES AND CARRIERS**  
**Narragansett Bay Commission - RIPUC Docket Number 3707**  
**Calculation of Rate Year (F/Y 2007) Electricity Cost Using 2-Year Average**

**Calculation of 2-Year Average \$/kWh:**

Line No.	Location	2004 Delivery Cost A	2004 kWh Use B	2004 Avg \$/kWh C	2004 Delivery Cost D	2005 Delivery Cost E	2005 kWh Use F	2005 Avg \$/kWh G	2-Year Avg \$/kWh H (Col. D + G Divided by 2)
1	Fields Point	\$ 497,395	Per NBC 17,968,000	0.02768	(Col. B / C) 0.02768	Per NBC \$ 480,582	Per NBC 17,748,000	(Col. E / F) 0.02708	0.02738
2	Bucklin Point	196,779	14,150,000 *	0.02640 *	0.02640 *	\$ 237,872	14,150,000 *	0.02770 *	0.02705
3	COB	32,108	1,029,800	0.03118	0.03118	\$ 34,067	1,126,800	0.03023	0.03071
4	IM	72,762	821,682	0.08855	0.08855	\$ 67,802	770,358	0.08801	0.08828
5	Totals	\$ 799,044	33,969,482	0.02352	0.02352	\$ 820,323	33,795,158	0.02427	

**Calculation of Rate Year Adjustment:**

Line No.	Location	2007 kWh Use A	2-Year Avg \$/kWh B (Col H, 2004 - 2005)	2007 Delivery Cost C (Col. B x C)	2007 Supply Cost D (Col. B x 0.07195)	2007 Customer Chg. E (Per NBC)	Total Prior to RIGHT G (Col. D + E)	RIGHT H (Col. H - E)	Total Incl. RIGHT I (Col. F / .96)
6	Fields Point	17,858,000	0.02738	\$ 488,955	\$ 1,284,883	\$ 2,837	\$ 1,776,675	\$ 74,028	\$ 1,850,704
7	Bucklin Point	14,150,000 *	0.02705 *	382,758	1,018,093	2,837.00	\$ 1,403,687	\$ 58,487	\$ 1,462,174
8	COB	1,078,300	0.03071	33,110	77,584	2,837.00	\$ 113,531	\$ 4,730	\$ 118,262
9	IM	796,020	0.08828	70,275	-	7,000.00	\$ 77,275	\$ 3,220	\$ 80,495
10	Totals	33,882,320		\$ 975,098	\$ 2,380,559	\$ 15,511	\$ 3,371,169	\$ 140,465	\$ 3,511,634
11					Less: Incinerator Electricity, Per Schedule WEE-10				\$ 142,194
12									\$ 3,369,440
13									\$ 3,433,372
14									\$ (63,932)

NOTE: \* Bucklin Point kWh usage estimated due to large expansion of facility. \$/kWh actual from 2004 & 2005 invoices, per NBC.